

### **Amendments to the Claims:**

Please AMEND the claims as indicated in the listing of claims below. This listing of claims will replace all prior versions, and listings of claims in the Pending Application. The claims are marked to indicate the changes made with deletions indicated by strikethroughs and additions indicated by underlining.

Claim 1 (Currently amended): An object detection system for ~~a vehicle mobility~~an access device comprising:

~~an a~~ first electrode coupled ~~to a portion of~~with the ~~mobility~~ access device and configured to for defining produce an electric field;

an electric field imaging module configured to for energizing the electrode and samplingsample the electric field and produce an output indicative of an object in or proximate the electric field; and

a controller in communication with the electric field imaging module and configured to for operating operate the mobility access device, ~~the controller in communication with the electric field imaging module for receiving an output therefrom indicative of the presence of an object in or proximate to the electric field.~~

Claim 2 (Currently amended): The system of claim 1 wherein the first electrode comprises a ~~zigzag pattern, the shape thereof providing~~ configured to provide the electric field with a ~~known predetermined~~ shape and/or volume.

Claim 3 (Currently amended): The system of claim 1 wherein the first electrode comprises a conductive film.

Claim 4 (Currently amended): The system of claim 3 wherein the conductive film comprises metalized mylar~~Mylar~~<sup>®</sup>.

Claim 5 (Currently amended): The system of claim 1 wherein the first electrode comprises a flex circuit.

Claim 6 (Currently amended): The system of claim 1 wherein the first electrode comprises a wire.

Claim 7 (Currently amended): The system of claim 1 wherein the controller prevents operation of the ~~mobility~~-access device in response to the output.

Claim 8 (Currently amended): The system of claim 1 wherein the ~~vehicle-mobility~~-access device comprises a ~~wheelchair~~-lift including a ~~lift~~-platform, an inboard rollstop, an outboard rollstop and a baseplate.

Claim 9 (Currently amended): The system of claim 8 wherein the first electrode is coupled to one of the ~~lift~~-platform, inboard rollstop, outboard rollstop and ~~the~~-baseplate.

Claim 10 (Currently amended): The system of claim 8 ~~wherein the electrode comprises further comprising a second, third, and fourth~~plurality of electrode[s], wherein the first, second, third and fourth electrodes are connected with and at least one electrode of the plurality is coupled to each of the platform, inboard rollstop, outboard rollstop and the baseplate, respectively.

Claim 11 (Currently amended): The system of claim 10 wherein the ~~plurality of~~first, second, third and fourth electrodes are energized in succession to discriminate one or more of ~~the a~~object's size of the object, the object's a shape of the object and the a distance of the object's distance from each of the ~~plurality of~~ electrodes.

Claim 12 (Currently amended): The system of claim 1 wherein the controller and imaging device are configured to cooperate to calibrate the first electrode ~~at an instant when the mobility-access device is known to be unoccupied.~~

Claim 13 (Currently amended): The system of claim 12 wherein the controller and imaging device are configured to cooperate to calibrate the first electrode~~instant occurs as the mobility access device is fully deployed.~~

Claim 14 (Currently amended): The system of claim 1 wherein the ~~vehicle-mobility~~-access device comprises a ~~wheelchair~~-ramp including an ~~inclined ramp section~~ coupled to ~~the a~~ vehicle proximate a doorway.

Claim 15 (Original): The system of claim 14 wherein the electrode is coupled to one of the ramp section and a threshold area interior to the vehicle proximate the doorway.

Claim 16 (Original): The system of claim 1 wherein the imaging module is integral with the controller.

Claim 17 (Currently amended): A method for electric field sensing of an object on ~~an vehicle~~ mobility-access device, the method comprising the steps of:

- deploying the ~~mobility~~-access device;
- calibrating a first electrode coupled ~~to~~ with a ~~first portion of the mobility-access~~ device; and
- detecting ~~the presence of an object on the mobility-access device~~ by with the first electrode.

Claim 18 (Currently amended): The method of claim 17 wherein the calibrating ~~step~~ the first electrode comprises:

- detecting ~~an instant~~ when the ~~mobility~~-access device is fully deployed;
- energizing the first electrode to generate ~~the~~ a baseline electric field ~~at the instant~~;
- sampling the baseline electric field; and
- storing characteristics of the baseline electric field in a memory.

Claim 19 (Currently amended): The method of claim ~~17-18~~ wherein ~~the detecting step~~ the object on the access device comprises:

- generating an electric field from the first electrode; and
- comparing the electric field ~~from the generating step~~ with ~~a~~ the baseline electric field.

Claim 20 (Currently amended): The method of claim 19 wherein ~~the comparing step~~ the electric field with the baseline electric field comprises:

- sampling the ~~generated~~-electric field;
- storing characteristics of the ~~generated~~-electric field in the memory; and
- discriminating differences between the ~~stored~~-characteristics of the baseline electric field and the ~~generated~~-electric field.

Claim 21 (Currently amended): The method of claim 17 further comprising ~~the step of~~ preventing operation of the ~~mobility~~-access device.

Claim 22 (Currently amended): The method of claim 21 further comprising ~~the step of~~ actuating an alarm indicative of the ~~presence of an object~~.

Claim 23 (Currently amended): The method of claim 17 further comprising:  
calibrating a second electrode coupled to ~~with a second portion of the mobility~~  
access device; and  
detecting the ~~presence of an object~~ on the ~~mobility~~-access device ~~by using~~ the second electrode.

Claim 24 (Currently amended): The method of claim 23 further comprising ~~the step of~~ energizing the first and second electrodes in succession to discriminate one or more of ~~the object's size of the object, the object's a shape of the object and a distance of the object's distancee~~ from one or more of the first and second electrodes.

Claim 25 (Currently amended): The method of claim 17 wherein the ~~mobility~~-access device comprises a wheelchair lift.

Claim 26 (Currently amended): The method of claim 17 wherein the ~~mobility~~-access device comprises a wheelchair ramp.